

## **REMARKS**

### **The Claim Amendment**

The features of claim 2 are incorporated into claim 1.

Claim 2 is cancelled.

Claims 4, 6 and 7 are amended to further clarify them, e.g., by reformulating them as combination claims. No new issues are presented as no additional elements are added to these claims.

Claims 4 and 17 are rewritten in independent form.

### **Claim Rejections under 35 USC § 103**

Claims 1-14, 16 and 18-22 were rejected as allegedly unpatentable over US 4,600,425 in view of JP 4-2094364.

Claim 1 recites that the cooling jacket encases the pipe up to its orifice. US '425 only teaches and suggests embodiments where only the part of the bubbler tube that is mounted in the refractory wall is surrounded by a coolant jacket, e.g., the part of the bubbler that reaches into the glass melt is not encased. See abstract, column 3, lines 33-51, column 7, lines 30-41, and figure 4.

The secondary reference, JP '364, is only alleged to provide motivation for the platinum surface. Thus, this combination of references does not teach or suggest the invention of claim 1 and its dependent claims for at least the reason discussed above.

Applicants additionally disagree with the allegation that the secondary reference provides motivation for the platinum surface. This reference is directed to an electrode, which is coated with platinum and iridium oxide. Thus, even if this reference were combined with the primary reference, it does not teach a surface of platinum or of a platinum alloy, but only a platinum oxide coating.

Additionally, this secondary reference is from a different field of art (electrodes), which one of ordinary skill in the art of melting glasses would not have the occasion to consider, e.g., is non-analogous art. See *In re Clay*, 23 USPQ.2d 1058 (1992).

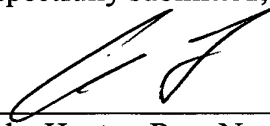
Independent claim 4 is directed to a combination where the device is in combination with a gas that is introduced, which is chlorine gas or a mixture of gases containing chlorine gas.

The Office Action alleges that chlorine gas is a well-known forming gas, which is obvious to use. Applicants respectfully disagree. Chlorine gas is not a forming gas. The reference itself also points away from using chlorine gas. U.S. '425 teaches that the gas used is a corrosion inhibiting gas that minimizes oxidation (see abstract), is a "reducing gas, e.g., forming gas, or an inert gas," such as nitrogen or hydrogen-nitrogen mixture, which is especially suitable since hydrogen is an effective scavenger of oxygen (see column 3, lines 21-32, column 6, lines 23-25, column 7, lines 12-15). Chlorine gas does not satisfy the requirements of the gases taught by US '425.

Reconsideration is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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